AMSAT News Service Weekly Bulletins
Issue: ANS-221
Date: 2004-08-08
Sources: amsat-ans-2004-ans-221.02.txt, amsat-ans-2004-ans-221.05.txt

---

New amateur satellite transponder project announced

AMSAT News Service Bulletin 221.02 From AMSAT HQ
SILVER SPRING, MD. August 8, 2004
To All RADIO AMATEURS
BID: $ANS-221.02

The Chairman of AMSAT-UK, Professor Sir Martin Sweeting G3YJO announced a new amateur transponder project to be launched as part of the ESA SSETI Express satellite.

Speaking at the opening of the 2004 AMSAT-UK Colloquium at the University of Surrey in Guildford, he expressed his delight that AMSAT-UK has been able to work with the European Space Agency to provide, at very short notice, an S band (2.4GHz) transmitter.

The SSETI Express project is believed to be the first ever pan-European student satellite with over 100 students from more than nine different countries working on it. The project is being coordinated and managed buy the Education Office of ESA.

It is intended that this transmitter will be available for use as the downlink of a single channel FM U/S transponder. The 437MHz receiver is also being provided to ESA by another radio amateur - Holger Eckart DF2FQ.

These frequencies will enable the many amateurs who already have Oscar 40 equipment to use it in an exciting new way.

After integration of the spacecraft, which is due to start at the ESTEC laboratories in the Netherlands next month (August), SSETI Express is intended to be launched into a sun synchronous 680km orbit from Plestek in Russia in April 2005.

The satellite is in the 80kg class and is being designed and constructed by a number of European University teams which include students and teachers. The onboard experiments include attitude control, a camera and a cold gas propulsion unit.

It is intended that the 2.4GHz downlink transmitter will transmit satellite telemetry and data at 38k4 data rate before being switched over to voice transponder operation after the onboard experiments have been completed.

ESA will shortly be announcing a worldwide competition for radio amateurs who download the data from the satellite and forward it to a website which is under construction. There will be a valuable award for the amateur who provides the largest amount of verified data over the first few weeks/months of operation.

The 2.4GHz downlink exciter, the switched mode power supply and control interfaces are being developed by an AMSAT-UK team comprising of Sam Jewell G4DDK, David Bowman G0MRFand Jason Flynn G7OLD with Graham Shirville G3VZV assisting.

The 3 watt 2.4GHz power amplifier is completed and has been provided by Charles Suckling G3WDG and this unit is already space qualified as it is identical to the one flying in the recently launched Oscar 51 spacecraft.

The S band antennas are three flat plate patches that have been developed

and produced by the Wroclaw University of Technology in Poland.

Professor Sir Martin Sweeting emphasized that AMSAT-UK is delighted to have been entrusted with such an important task and that development team will have the organization's full support.

Those interested in finding out more about Amateur Satellites may like to know that AMSAT-UK produce an excellent newsletter called Oscar News which is sent to all members. For further information contact the AMSAT-UK secretary Jim Heck, G3WGM

Tel: +44 (0)1258 453959
E-mail: g3wgm@amsat.org
Website: www.uk.amsat.org

[ANS thanks Trevor, M5AKA for the above information]

/EX

SB SAT @ AMSAT $ANS-221.03
Echo Experimenters Wednesday for 11 Aug 2004

AMSAT News Service Bulletin 221.03 From AMSAT HQ
SILVER SPRING, MD. August 8, 2004
To All RADIO AMATEURS
BID: $ANS-221.03

The next Exp Wed will test the 9k6 Pacsat Broadcast Protocol, Store and Forward, BBS system on Echo.

Uplink: 145.860 MHz FM 9k6 digital
Downlink: 435.150 MHz FM 9k6 digital

Start: 11 Aug 2004 @ 0240 UTC
End: 12 Aug 2004 @ 0340 UTC

The FM repeat mode transmitter on 435.300 will be turned off during this time, and power to the 435.150 transmitter will be increased. Please check the digital downlink for any last minute changes.

This will be the first user access of the BBS system. Please understand that new software will be uploaded to the satellite when we close this first window of user access. At that time, all messages in the BBS system will be lost. Please keep your uploads to messages only. Let's give everyone a chance to upload and download messages from Echo during this one day test.

The large files that are stored in the BBS that begin with "we" are Whole Orbit Data (WOD) files. They are binary data that require a decoding program to extract the information. There is no need to download one of those files. And the "Upload Test" picture files are all the same picture. These were used to test the uploading speed as well as uploading with a CTCSS tone enabled. There is no need to download those either.

Just keep it to messages and give everyone a chance to use the BBS system. And please avoid using ALL in the TO field of your message. Send your hello or introductory message to "ECHO USERS" or just "ECHO" instead.

Enjoy Echo!

[ANS thanks Mike, KE4AZN for the above information]

/EX

==========
ADDITIONAL COMPONENT BULLETINS RECOVERED FROM OTHER POSTS
==========

SB SAT @ AMSAT $ANS-221.05
Echo Voice Ops Challenge

AMSAT News Service Bulletin 221.05 From AMSAT HQ
SILVER SPRING, MD. August 8, 2004
To All RADIO AMATEURS
BID: $ANS-221.05

In an attempt to reduce the congestion and allow more contacts to be made on Echo, Mike, KE4AZN challenges every user to make only one contact per pass that you initiate with a call. After that point, sit back and enjoy the others making contacts. If someone calls you, then by all means reply and complete that contact. Then go back to listening. Maybe if more of us take up that philosophy everyone will join in and more contacts can be made.

[ANS thanks Mike, KE4AZN for the above information]

(Now if only we could get them to make this a rule for the FM satellites on Field Day!!!)

delete "nojunk" from e-mail address before replying.